IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

ACQIS LLC,	§	
	§	
Plaintiff,	§	
	§	**CIVIL ACTION No. 6:09-CV-148-LED**
v.	§	
	§	**JURY TRIAL DEMANDED**
INTERNATIONAL BUSINESS MACHINES CORP.,	§	
	§	
Defendant.	§	

INTERNATIONAL BUSINESS MACHINES CORPORATION'S MOTION FOR JUDGMENT AS A MATTER OF LAW REGARDING INVALIDITY

TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES

Page

Cases

Statutes

Pursuant to Federal Rule of Civil Procedure 50, defendant International Business Machines, Corporation ("IBM") hereby moves the Court for entry of judgment as a matter of law on invalidity of the asserted claims of the '415, '416 and '779 patents under 35 U.S.C. §§ 102(a), (b), (g)(2), and 103(a).

INTRODUCTION

ACQIS asserts that IBM infringes claims 12 and 74 of U.S. Patent No. 7,363,415 ("the '415 patent"), claim 56 of U.S. Patent No. 7,363,416 ("the '416 patent") and claims 16, 26 and 57 of U.S. Patent No. 7,376,779 ("the '779 patent") (collectively, "the asserted claims"). The undisputed evidence presented at trial has shown that every element of the asserted claims was known and used in the prior art. Because there is no legally sufficient evidentiary basis for a reasonable jury to find that the asserted claims of the '415, '416 and '779 patents are valid, IBM is entitled to judgment as a matter of law ("JMOL").

PROCEDURAL HISTORY

Pursuant to the parties' stipulation, the Court ordered that written motions for judgment as a matter of law "may be made at any time before the case is submitted to the jury." Fed. R. Civ. P. 50(a)(2). The Court shall consider any timely written motion in conjunction with IBM's oral motion presented on February 16, 2011. (2/16/2011 P.M. Tr. at 94:13-96:23.)

LEGAL STANDARD

JMOL is proper when "the facts and inferences point so strongly and overwhelmingly in favor of one party that the Court believes that reasonable men could not arrive at a contrary verdict." *Wallace v. Methodist Hosp. Sys.*, 271 F.3d 212, 219 (5th Cir. 2001); *see also* Fed. R. Civ. P. 50(a) (JMOL appropriate if there is no "legally sufficient evidentiary basis to find for the party on that issue"). The grant of a JMOL is appropriate in a patent case, and the Federal Circuit has frequently affirmed the decision of a district court to grant JMOL. *See, e.g.,*

Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572 (Fed. Cir. 1996) (affirming grant of JMOL that the patent was anticipated).

"A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention." *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003). A single system may be represented by more than one document. *IP Innovation L.L.C. v. Red Hat, Inc.*, case no. 2:07-cv-00447-RRR (D.I. 272) (Oct. 17, 2010) (citing *Studiengesellschaft Kohle, m.b.H. v. Dart Indus., Inc.*, 726 F.2d 724, 726-27 (Fed. Cir. 1984)). A patent is invalid as obvious "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a).

Here, because no reasonable jury could find the patents-in-suit valid in light of Ketris, RLX, QuantumNet or Hong, alone or in combination, judgment as a matter of law is appropriate.

ARGUMENT

I. KETRIS ANTICIPATES AND/OR RENDERS OBVIOUS EACH OF THE ASSERTED CLAIMS

Ketris (DX 4) was a rack-mounted server system created and sold by a company called Ziatech. The Ketris system is described in detail in the Ketris 9000 Brochure (DX 47); Ketris 9000 System Hardware Manual (DX 48); Ketris Server Blade Hardware Manual (DX 49); Ketris Medial Blade Hardware Manual (DX 50); Ketris Manager Software Manual (DX 51); Ketris System Management Overview (DX 52); and Intel Ethernet PCI/Cardbus Controller Datasheet (DX 53). Ketris anticipates the asserted claims under 35 U.S.C. § 102(a) and (g)(2) and/or renders the asserted claims obvious under 35 U.S.C. § 103.

A. Ketris Is Prior Art Under 35 U.S.C. § 102(g)

Mr. Medeiros testified that Ketris was conceived in 1998 and was in public use and on sale in April 2000, prior to the priority date of the patents-in-suit. (2/17/11 A.M. 50:16-51:1.) The Ketris Blade Server Datasheet (DX 45); Ketris White Papers (DX 43 and 44); Ketris Engineering Reference Specification (DX 41); Ketris Product Requirements (DX 42); Ketris Press Release (DX 36); Ketris Demo Manual (DX 40); and email regarding Ketris Product Shipped (DX 34) corroborate Mr. Medeiros's testimony regarding the conception and development of Ketris.

B. Ketris Discloses Each Element of the Asserted Claims

1. Ketris discloses a computer system [preamble '415 claims 12 and 74, '416 claim 56 and '779 claim 16, 26 and 57]

The preamble of the asserted claims requires "a computer system." The Ketris 9000 system is a computer system. (DX 4.) The Ketris 9000 System Hardware Manual states: "The Ketris 9000 is a multi-server system featuring 'plug-in' CompacPCI form-factor components with remote system deployment and management in a rack-mount chassis. System characteristics such as high-density, reliability, and ease of deployment and management help maximize the Ketris 9000's operational efficiency and economy." (DX 48 at 10.) Thus, the preamble is met by Ketris.

2. Ketris discloses a console comprising an Ethernet hub controller, a first coupling site and a second coupling site, each coupling site comprising a connector and a slot, the console being a first enclosure housing the Ethernet hub controller, each coupling site ['415 claims 12(a) and 74(a), '416 claim 56(a-c) and '779 claim 16(a-c), 26(a-c) and 57(a-c)]

The Court defined "console" to mean "a chassis that connects several components of the computer system." The Ketris system has a chassis. (DX 4; 2/17/11 A.M. Tr. 33:8-9.) Ketris also has an Ethernet hub controller. (DX 4.) "Hub" was defined by the Court as "a device

joining communication lines at a central location, providing a common connection to all devices on the network." Mr. Medeiros testified that Ketris had "an Ethernet switch, which provides the overall switching for Ethernet in the backplane." (DX 4; 2/17/11 A.M. Tr. 35:3-5.) Ketris also had first and second coupling sites, comprising a connector and slot. (DX 4; 2/17/11 A.M. Tr. 34:7-15.) "Slot" was defined by the Court as "a space for receiving a computer module." Moreover, Ketris's chassis, or console, was an enclosure housing the Ethernet hub controller and the coupling sites. (DX 4; 2/17/11 A.M. Tr. at 33:8-20 ("[T]his is an overall chassis product, which is the metal enclosure that holds the midplane, which is this section here (indicates) where all the boards plug into."), 34:7-15, 34:23-35:5.) Thus, this element is met by Ketris.

3. Ketris discloses a plurality of computer modules, each coupled to one of the coupling sites through the connector and the slot ['415 claims 12(b) and 74(b), '416 claim 56(d) and '779 claim 16(d), 26(d) and 57(d)]

The Court defined computer module as "an assembly for providing a computing function within a computer system as recited in a particular claim." In the Ketris system, there were "a number of server blades that plug into the slots." (DX 4; 2/17/11 A.M. Tr. 35:2-3.) Thus, this element is met by Ketris.

4. Ketris discloses a processing unit ['415 claims 12(c) and 74(c); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

Each server blade in the Ketris system has a microprocessor. (DX 4; DX 49; 2/17/11 A.M. Tr. 38:5-8.) Thus, this element is met by Ketris.

5. Ketris discloses main memory coupled to the processing unit ['415 claims 12(c) and 74(c); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

Each server blade in the Ketris system has main memory. (2/17/11 A.M. Tr. 38:9-15.) Thus, this element is met by Ketris.

6. Ketris discloses an interface controller coupled to a differential signal channel for communicating an encoded serial bit stream of Peripheral Component Interconnect (PCI) bus transaction [‘415 claims 12(c) and 74(d); ‘779 claims 16(c), 26(c) and 57(c); and ‘416 claim 56(c)]

The Court defined “PCI bus transaction” to mean “a data signal communication with an interconnected peripheral component.” Ketris has an interface controller coupled to a differential signal channel for communicating an encoded serial bit stream of a data signal communication with an interconnected peripheral component. (DX 4; DX 49; 2/17/11 A.M. Tr. 47:3-8.) Thus, this element is met by Ketris.

7. Ketris discloses an Ethernet controller coupled to the Ethernet hub controller through the connector of the coupling site for communication between the computer modules [‘415 claim 12(c); ‘779 claims 26(c) and 57(c); and ‘416 claim 56(c).]

Each Ketris server blade has multiple Ethernet controllers coupled to multiple Ethernet hub controllers (switches) for communication between the server blades. (DX 4; DX 49; 2/17/11 A.M. Tr. 42:16-43:16.) Thus, this element is met by Ketris.

8. Ketris discloses a computer system wherein each of the computer modules operates fully independent of each other [‘415 claims 12(d) and 74(e); ‘779 claims 16(d), 26(d), and 57(d); and ‘416 claim 56(d)]

A Ketris server blade, “functions as an independent server in a Ketris multi-server system.” (DX 4; DX 49 at 7.) Moreover, functions from one Ketris server blade can “failover” to another server blade in the system. (DX 4; DX 51; 2/17/11 A.M. Tr. 58:7-12.) Thus, this element is met by Ketris.

9. Ketris discloses a differential signal channel comprising two sets of unidirectional serial bit channels which transmit data in opposite directions. ['415 claims 12(e) and 74(d); '779 claim 57; and '416 claim 56(c)]

Moreover, each of Ketris's differential signal channels comprises two sets of unidirectional serial bit channels which transmit data in opposite directions. (DX 4; DX 48; 2/17/11 A.M. Tr. 47:22-25.) Thus, this element is met by Ketris.

10. Ketris discloses a graphics controller ['415 claim 74(c)]

The Ketris server blades have graphics controllers. (DX 4; DX 49; 2/17/11 A.M. Tr. 38:16-25.) Thus, this element is met by Ketris.

11. Ketris discloses a mass storage device coupled to the processing unit ['415 claim 74(c)]

Ketris server blades may be configured with a rotating media, hard disk, flash, compact flash or external hard drive on media blade. (DX 4; 2/17/11 A.M. Tr. 40:23-41:8; 41:20-42:4; DX 49 at 8.) Thus, this element is met by Ketris.

12. Ketris discloses a computer system wherein one of the computer modules can replace another one of the computer modules in operation ['415 claim 74(e) and '779 claim 26(d)]

The Ketris system features fault tolerance and failover. (DX 4; 2/17/11 A.M. 57:13-58:12.) The Ketris datasheet describes the "High-Availability Management" feature, whereby one Ketris server blade can replace another in operation: "In the event of a failure of the active manager, another server is automatically elected as the active manager, providing continuous management of the chassis and remaining servers." (DX 52 at 3; DX 4.) Thus, this element is met by Ketris.

13. Ketris discloses an encoded PCI bus transaction comprising encoded PCI address and data bits [‘415 claim 74(f)]

Ketris has an Ethernet controller and a switch that communicate encoded PCI bus transaction comprising encoded PCI address and data bits. (DX 4; 2/17/11 A.M. Tr. 44:16-45:4.) Thus, this element is met by Ketris.

14. Ketris discloses a power supply and a serial communication hub controller powered by the power supply [‘779 claim 16(b)]

The Ketris system has power supplies, which are modular units that provide power to the system. (DX 4; DX 48; 2/17/11 A.M. Tr. 34:20-35:1.) Thus, this element is met by Ketris.

15. Ketris discloses circuitry that can vary a clock frequency of the processing unit for varying its power consumption [‘779 claims 16(c) and 26(c)]

The marketing brochure for the Ketris 9000 system discloses that Ketris server blades use a 500 MHz Intel “Pentium” III Processor, which can vary clock frequency for varying power consumption. (DX 47 at 2; DX 4; 2/22/11 A.M. Tr. 75:19-76:13.) Thus, this element is met by Ketris.

II. RLX[1] RENDERS OBVIOUS EACH OF THE ASSERTED CLAIMS

RLX (DX 365) is widely regarded as the first commercial blade server system. The RLX system is described in detail in the RocketLogix Software Features (DX 294); RocketLogix Engineering Documents (DX 292 and 293); RocketLogix Prototype photo (DX 298); RocketLogix Engineering Design Proposal (DX 310); RocketLogix Board Topology (DX 312); RocketLogix Tasks document (DX 313); RLX Presentation (DX 316); RLX System 24

[1] Alone or combined with Hong.

Hardware (DX 319); and the Hipp Patent (DX 340). RLX renders the asserted claims obvious under 35 U.S.C. § 103(a) alone or in combination with Hong.[2]

A. RLX Is Prior Art Under 35 U.S.C. § 102(g)(2)

Mr. Irving testified that RLX was conceived of by Chris Hipp by January of 2000, prior to the priority date of the patents-in-suit. (2/16/11 P.M. Tr. 189:9-18.) Mr. Irving further testified that RLX was diligently reduced to practice no later than August, 2000, when RLX prototypes shipped. (2/16/11 P.M. Tr. 197:23-198:14.) Mr. Irving's testimony is corroborated by RocketLogix Software Features (DX 294); RocketLogix Engineering Documents (DX 292 and 293); RocketLogix Prototype photo (DX 298); RocketLogix Engineering Design Proposal (DX 310); RocketLogix Board Topology (DX 312); RocketLogix Tasks document (DX 313); RLX Presentation (DX 316); RLX System 24 Hardware (DX 319); and the Hipp Patent (DX 340).

B. RLX Discloses Each Element Of The Asserted Claims

1. RLX discloses a computer system [preamble '415 claims 12 and 74, '416 claim 56 and '779 claim 16, 26 and 57]

The preamble of the asserted claims requires "a computer system." The RLX System 324 is a computer system. (DX 365.) The RLX System 324 Hardware Installation Guide describes RLX as "a complete computing system that includes processor, memory, and network connections on a single board. The ServerBlade provides outstanding sub-U server density and server scalability by allowing up to 24 hot-pluggable ServerBlades in a single RLX system." (DX 319 at 1-4.) Thus, the preamble is met by RLX.

2. RLX discloses a console comprising an Ethernet hub controller, a first coupling site and a second coupling site, each coupling site comprising

[2] IBM reserves the right to argue that RLX also anticipates each of the asserted claims for the reasons discussed herein.

a connector and a slot, the console being a first enclosure housing the Ethernet hub controller, each coupling site ['415 claims 12(a) and 74(a); '416 claim 56(a-c) and '779 claim 16(a-c), 26(a-c) and 57(a-c)]

The Court defined "console" to mean "a chassis that connects several components of the computer system." "Hub" was defined by the Court as "a device joining communication lines at a central location, providing a common connection to all devices on the network." Mr. Irving testified that the RLX system had an Ethernet hub card through which all the server blades "could essentially connect their ethernet into [the] hub and as a result communicate to each other," or to the internet. (2/17/11 A.M. Tr. 14:22-15:2; DX 365.) "Slot" was defined by the Court as "a space for receiving a computer module." Thus, this element is met by RLX.

3. RLX discloses a plurality of computer modules, each coupled to one of the coupling sites through the connector and the slot ['415 claims 12(b) and 74(b); '416 claim 56(d) and '779 claim 16(d), 26(d) and 57(d)]

The Court defined computer module as "an assembly for providing a computing function within a computer system as recited in a particular claim." Mr. Irving testified that an RLX chassis has 24 slots and accommodates 24 server blades. (2/17/11 A.M. Tr. 14:15-17; DX 365.) Thus, this element is met by RLX.

4. RLX discloses a processing unit ['415 claims 12(c) and 74(c); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

Each RLX server blade has a processor. (2/17/11 A.M. Tr. 6:13-25; DX 365.) Thus, this element is met by RLX.

5. RLX discloses main memory coupled to the processing unit ['415 claims 12(c) and 74(c); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

Each RLX server blade had a dual in-line memory ("DIM") connector for system memory. (2/17/11 A.M. Tr. 12:10-22; DX 365.) Thus, this element is met by RLX.

6. RLX discloses an interface controller coupled to a differential signal channel for communicating an encoded serial bit stream of Peripheral Component Interconnect (PCI) bus transaction ['415 claims 12(c) and 74(d); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

The Court defined "PCI bus transaction" to mean "a data signal communication with an interconnected peripheral component." Mr. Irving testified that on an RLX server blade, a data transfer "is made through the northbridge over PCI into the network interface controller, and [then] becomes Ethernet [and is transferred] through the connector to the hub back out of the hub." (2/17/11 A.M. Tr. at 26:13-16.) Mr. Irving further testified that the RLX server blade connects a parallel PCI bus through an Ethernet controller to serial Ethernet. (2/17/11 A.M. Tr. at 26:21-27:2; DX 365.) Thus, this element is met by RLX. Dr. McClure testified that it would be obvious for one to combine RLX with the Hong reference (DX 54). (2/22/11 A.M. Tr. 93:13-94:7.) For the reasons discussed herein, Hong discloses this element. Thus, RLX combined with Hong renders this element obvious.

7. RLX discloses an Ethernet controller coupled to the Ethernet hub controller through the connector of the coupling site for communication between the computer modules ['415 claim 12(c); '779 claims 26(c) and 57(c); and '416 claim 56(c).]

Mr. Irving testified that the RLX server blades employed Ethernet controllers to permit the server blades to communicate with each other, peripherals and the Internet. (2/17/11 A.M. Tr. 9:4-10:7; DX 365.) The RLX topology breakdown shows the Ethernet controllers coupled to the Ethernet hub controller through the coupling sites. (DX 312.) Thus, this element is met by RLX.

8. RLX discloses a computer system wherein each of the computer modules operates fully independent of each other [‘415 claims 12(d) and 74(c); ‘779 claims 16(d), 26(d), and 57(d); and ‘416 claim 56(d)]

The RLX Hardware Installation Guide says that RLX server blades are hot-pluggable, which means that the blades “operate on their own.” (DX 319 at 1-4; 2/22/11 A.M. Tr. at 88:19-89:10.) Thus, this element is met by RLX.

9. RLX discloses a differential signal channel comprising two sets of unidirectional serial bit channels which transmit data in opposite directions. [‘415 claims 12(e) and 74(d); ‘779 claim 57; and ‘416 claim 56(c)]

The RLX topology breakdown shows the Ethernet midplane in the RLX system. (DX 312; DX 365.) Mr. Irving described the function of the Ethernet midplane as using two sets of unidirectional serial bit channels to transmit and receive data. (2/17/11 at 25:24-26:2; 26:22-27:2.) Thus, this element is met by RLX. Dr. McClure testified that it would be obvious for one to combine RLX with the Hong reference (DX 54). (2/22/11 A.M. Tr. 93:13-94:7.) For the reasons discussed herein, Hong discloses this element. Thus, RLX combined with Hong renders this element obvious.

10. RLX discloses a graphics controller [‘415 claim 74(c)]

Mr. Irving testified that RLX has graphics capability through a mezzanine connector on the server blade. (2/17/11 A.M. Tr. 12:23-13:11; DX 365.) Thus, this element is met by RLX.

11. RLX discloses a mass storage device coupled to the processing unit [‘415 claim 74(c)]

The RLX server blades have hard drives. (DX 365.) Mr. Irving testified that RLX server blades have the option of two hard drives or a single larger hard drive, and that these hard drives were available in the commercially released RLX system. (2/17/11 A.M. Tr. 10:20-11:13.) Thus, this element is met by RLX.

12. RLX discloses a computer system wherein one of the computer modules can replace another one of the computer modules in operation [‘415 claim 74(c) and ‘779 claim 26(d)]

The RLX System 324 Platform Guide describes the RLX system’s Installation Server and Network Boot capabilities, and says that “any ServerBlade set up as the Installation Server can be used to re-image any other ServerBlade in any chassis on the Management Network.” (DX 320 at p. 3-2; DX 365.) Thus, this element is met by RLX.

13. RLX discloses an encoded PCI bus transaction comprising encoded PCI address and data bits [‘415 claim 74(f)]

The Court defined “PCI bus transaction” to mean “a data signal communication with an interconnected peripheral component.” Mr. Irving testified that on an RLX server blade, a data transfer “is made through the northbridge over PCI into the network interface controller, and [then] becomes Ethernet [and is transferred] through the connector to the hub back out of the hub.” (2/17/11 A.M. Tr. at 26:13-16.) Mr. Irving further testified that the RLX server blade connects a parallel PCI bus through an Ethernet controller to serial Ethernet. (2/17/11 A.M. Tr. at 26:21-27:2; DX 365.) Thus, this element is met by RLX. Dr. McClure testified that it would be obvious for one to combine RLX with the Hong reference (DX 54). (2/22/11 A.M. Tr. 93:13-94:7.) For the reasons discussed herein and at trial, Hong discloses this element. Thus, RLX combined with Hong renders this element obvious.

14. RLX discloses a power supply and a serial communication hub controller powered by the power supply [‘779 claim 16(b)]

Mr. Irving testified that the RLX system had on each side redundant power supplies, and that all cards, including the hub card, received their power through the power supplies. (2/17/11 A.M. Tr. 20:10-15; DX 365.) The April 19, 2000, RLX Engineering Design Proposal specifies that the RLX system has two load-balanced, hot-swappable power supplies. (DX 310 at HPACQ02737481.) Thus, this element is met by RLX.

15. RLX discloses circuitry that can vary a clock frequency of the processing unit for varying its power consumption ['779 claims 16(c) and 26(c)]

Mr. Irving testified that the RLX system could adjust its performance depending on various characteristics of the system. (2/17/11 A.M. Tr. at 7:4-7.) Specifically, the RLX system employed a Transmeta CPU which allowed the system to change its performance, its speed based on temperature of the environment, and the load of the software. (2/17/11 A.M. Tr. at 6:16-7:3; DX 365.) Thus, this element is met by RLX.

III. QUANTUMNET[3] RENDERS OBVIOUS EACH OF THE ASSERTED CLAIMS

The QuantumNet architecture consists of networking and computer server modules in a chassis. The QuantumNet system is described in detail in the Pocrass patent (DX 69); the QuantumNet website (DX 70); and the QuantumNet Brochure (DX 73). QuantumNet, alone or in combination with Hong, renders the asserted claims obvious under 35 U.S.C. § 103(a).[4]

A. QuantumNet Is Prior Art Under 35 U.S.C. § 102(b) and 103(a)

Mr. Pocrass testified that he conceived of QuantumNet in 1992. (2/17/11 A.M. Tr. 94:11-95:12.) He filed a patent on QuantumNet on January 22, 1993 and the patent issued on June 27, 1995. (DX 69.) Mr. Pocrass also testified that he began selling QuantumNet in 1995-1996. (2/17/11 A.M. Tr. at 97:21-98:1.) His testimony is corroborated by the QuantumNet website (DX 70) and the QuantumNet brochure (DX 73). Thus, QuantumNet is prior art because it was invented prior to Dr. Chu's alleged invention and QuantumNet was on sale years before the priority date of the patents in suit.

[3] Alone or combined with Hong

[4] IBM reserves the right to argue that QuantumNet also anticipates each of the asserted claims for the reasons discussed herein.

B. QuantumNet Discloses Each Element Of Asserted Claims 12 Of The '415 Patent

1. QuantumNet discloses a computer system [preamble '415 claims 12 and 74, '416 claim 56 and '779 claim 16, 26 and 57]

The preamble of the asserted claims requires "a computer system." QuantumNet was a rack-mountable server product. (2/17/11 A.M. Tr. 98:24-99:1; DX 70.) Thus, the preamble is met by QuantumNet.

2. QuantumNet discloses a console comprising an Ethernet hub controller, a first coupling site and a second coupling site, each coupling site comprising a connector and a slot, the console being a first enclosure housing the Ethernet hub controller, each coupling site ['415 claims 12(a) and 74(a); '416 claim 56(a-c) and '779 claim 16(a-c), 26(a-c) and 57(a-c)]

The Court defined "console" to mean "a chassis that connects several components of the computer system." "Hub" was defined by the Court as "a device joining communication lines at a central location, providing a common connection to all devices on the network." "Slot" was defined by the Court as "a space for receiving a computer module." The QuantumNet system had a chassis, Ethernet hubs and switches. (2/17/11 A.M. Tr. 100:25-101:4; DX 70, 73.) It also had rack-mountable servers, which connected to and communicated across the backplane. (2/17/11 A.M. Tr. 106:21-107:7; DX 70 at 2 ("In general, the QuantumServer chassis can be used to house all the major computing and networking resources of a network, such as file servers, Internet servers, fax servers, email gateways, firewalls, hubs, switches."); DX 70 at 13 ("The high-performance backplane includes four 10Mb Ethernet LANs, four Token Ring LANs, two 100 Mb Fast Ethernet LANs, fourteen ATM LA Ns, one management bus, and power.").) Thus, QuantumNet discloses this element.

3. QuantumNet discloses a plurality of computer modules, each coupled to one of the coupling sites through the connector and the slot ['415 claims 12(b) and 74(b); '416 claim 56(d) and '779 claim 16(d), 26(d) and 57(d)]

The Court defined computer module as "an assembly for providing a computing function within a computer system as recited in a particular claim." QuantumNet was a "rackmounted chassis system . . . used to house multiple processor and networking modules." (DX 70 at 2.) It could have up to 14 modules including networking modules. (DX 70 at 13 ("The QuantumNet Q6000 is a high speed, high capacity concentrator chassis with 14 slots. It is designed to house both networking modules and computer server modules.").) Mr. Pocrass also testified that QuantumNet "was based on the idea of rack-mountable servers with the router switches, all types of [E]thernet-type products." (2/17/11 A.M. Tr. 95:10-12). Thus, QuantumNet discloses this element.

4. QuantumNet discloses a processing unit ['415 claims 12(c) and 74(c); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

Each computer server module of the QuantumNet product has a processing unit. (DX70 at 13 ("The QuantumNet 6500 Processor Module series is the heart of the QuantumNet architecture. This powerful, versatile processor platform accommodates the Intel Pentium and Pentium Pro family of processors running from 133 to 200 MHz.").) Mr. Pocrass also testified that the QuantumNet system had "two Pentium processors." (2/17/11 A.M. Tr. 109:2-3.) Thus, QuantumNet discloses this element.

5. QuantumNet discloses main memory coupled to the processing unit ['415 claims 12(c) and 74(c); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

Each QuantumNet computer server module has a main memory coupled to the processing unit. (DX70 at 9 ("QuantumNet 6500 Processor Module series is available with 256K cache

memory standard and up to 256 megabytes of DRAM.").) Thus, QuantumNet discloses this element.

6. QuantumNet discloses an interface controller coupled to a differential signal channel for communicating an encoded serial bit stream of Peripheral Component Interconnect (PCI) bus transaction ['415 claims 12(c) and 74(d); '779 claims 16(c), 26(c) and 57(c); and '416 claim 56(c)]

The Court defined "PCI bus transaction" to mean "a data signal communication with an interconnected peripheral component." Mr. Pocrass testified with regard to the QuantumNet product: "I put them together, which was basically taking the Intel server, putting the hard drive on it. It has a PCI. It has -- it was a full-blown standalone server. And what we wanted to do is allow it to have multiples running across the backplane and integrating and working with the [E]thernet that we had. And we have switches, hubs, routers, and bridges for [E]thernet." (2/17/11 A.M. Tr. 102:10-17.) Mr. Pocrass also testified that the QuantumNet product had "communication between the blade servers." (2/17/11 A.M. Tr. 108:15-19).

Dr. McClure testified that it would be obvious for one to combine QuantumNet with the Hong reference. (2/22/11 A.M. Tr. 97:6-9). For the reasons discussed herein and at trial, Hong discloses this element. Thus, QuantumNet combined with Hong renders this element obvious.

7. QuantumNet discloses an Ethernet controller coupled to the Ethernet hub controller through the connector of the coupling site for communication between the computer modules ['415 claim 12(c); '779 claims 26(c) and 57(c); and '416 claim 56(c).]

QuantumNet discloses a PCI bus connected to an Ethernet controller which converts the PCI bus signal to an Ethernet signal which is transmitted over high speed Ethernet lines which are composed of two unidirectional differential signal channels (for transmit and receive). The QuantumNet system had a PCI bus. (DX70 at 10 ("Bus Architecture -- 64-bit PCI.").) Mr. Pocrass testified that the QuantumNet chassis was "rack-mounted with [E]thernet hubs,

switches." (2/17/11 A.M. Tr. 100:25-101:1.) Mr. Pocrass also testified that the QuantumNet product had "communication between the blade servers." (2/17/11 A.M. Tr. 108:15-19). Thus, QuantumNet discloses this element.

8. QuantumNet discloses a computer system wherein each of the computer modules operates fully independent of each other ['415 claims 12(d) and 74(e); '779 claims 16(d), 26(d), and 57(d); and '416 claim 56(d)

Each of the computer server modules in the QuantumNet system is substantially similar and provides independent processing. The QuantumNet product documentation demonstrate that the QuantumNet blade servers have the same technical specifications. (DX 70 at 10-11.) Also, Mr. Pocrass testified that each QuantumNet blade server "was a full-blown standalone server." (2/17/11 A.M. Tr. 102:10-17 ; DX 70 at 13 ("Each module may operate as a standalone product").) Thus, QuantumNet discloses this element.

9. QuantumNet discloses a differential signal channel comprising two sets of unidirectional serial bit channels which transmit data in opposite directions. ['415 claims 12(e) and 74(d); '779 claim 57; and '416 claim 56(c)]

The QuantumNet system specifies high speed Ethernet communications which transmit data in opposite directions. (DX 70 at 9 ("The 6500 modules include an onboard Ethernet/Fast Ethernet controller. … The QX backplane allows connection of the 6500 modules to any of four Ethernet, four Token Ring and two Fast Ethernet networks.").) Dr. McClure testified that "[E]thernet actually implies that there are unidirectional serial bit channels going in opposite directions." (2/22/11 A.M. Tr. 89:22-25.) Further, Dr. McClure testified that it would be obvious for one to combine QuantumNet with the Hong reference. (2/22/11 A.M. Tr. 97:6-9). For the reasons discussed herein and at trial, Hong discloses this element. Thus, QuantumNet combined with Hong renders this element obvious.

10. QuantumNet discloses a graphics controller [‘415 claim 74(c)]

Each QuantumNet computer server module can operate in various display modes as a result of its graphics controller, including VGA and SVGA. (DX70 at 11.) Mr. Pocrass also testified: “we had graphics with every chassis” (2/17/11 A.M. Tr. 110:12.) Thus, QuantumNet discloses this element.

11. QuantumNet discloses a mass storage device coupled to the processing unit [‘415 claim 74(c)]

Each computer server module of QuantumNet has mass storage, namely a hard disk drive, coupled to the processing unit. (DX70 at 9 (“The QuantumNet 6500 Processor Module Series . . . [has] [t]wo 31/2 inch disk drives [which] can be housed, either one floppy and one hard drive or two hard drives.”).) Mr. Pocrass also testified that a QuantumNet blade server “had a hard drive, floppy drive ….” (2/17/11 A.M. Tr. 109:2-3.) Thus, QuantumNet discloses this element.

12. QuantumNet discloses a computer system wherein one of the computer modules can replace another one of the computer modules in operation [‘415 claim 74(e) and ‘779 claim 26(d)]

The computer server modules of QuantumNet are essentially identical in relevant design features. Because they are virtually identical, any two of the computer modules can replace each other in operation. (DX70 at 14 (“Improved maintainability with hot swappable modules and easy reconfigurations.”).) Mr. Pocrass testified that the QuantumNet product was “hot swappable, meaning you can take the card out, put it in without having a power problem.” (2/17/11 A.M. Tr. 106:24-107:1.) Thus, QuantumNet discloses this element.

13. QuantumNet discloses an encoded PCI bus transaction comprising encoded PCI address and data bits [‘415 claim 74(f)]

QuantumNet is a computer system with a PCI bus. (DX70 at 10 (“Bus Architecture -- 64-bit PCI.”); 2/17/11 A.M. Tr. 108:25-109:7.) The Court defined “PCI bus transaction” to

mean "a data signal communication with an interconnected peripheral component." Mr. Pocrass testified with regard to the QuantumNet product: "I put them together, which was basically taking the Intel server, putting the hard drive on it. It has a PCI. It has -- it was a full-blown standalone server. And what we wanted to do is allow it to have multiples running across the backplane and integrating and working with the [E]thernet that we had. And we have switches, hubs, routers, and bridges for [E]thernet." (2/17/11 A.M. Tr. 102:10-17.) Mr. Pocrass also testified that the QuantumNet product had "communication between the blade servers." (2/17/11 A.M. Tr. 108:15-19).

Dr. McClure testified that it would be obvious for one to combine QuantumNet with the Hong reference. (2/22/11 A.M. Tr. 97:6-9). For the reasons discussed herein and at trial, Hong discloses this element. Thus, QuantumNet combined with Hong renders this element obvious.

14. QuantumNet discloses a power supply ['779 claim 16(b)]

QuantumNet discloses multiple power supplies. (DX 70 at 5 ("The QuantumServer chassis provides redundancy and reliability… The chassis uses a redundant primary and secondary transformer power supply. If one supply fails, the other one can provide complete, uninterrupted power to the chassis… Each individual module in the chassis includes the circuitry required to provide the appropriate DC power to the board and is isolated from the power supply by a fuse."). Thus, QuantumNet discloses this element.

15. QuantumNet discloses a serial communication hub controller powered by the power supply ['779 claim 16(b)]

The QuantumNet system had a chassis, Ethernet hubs and switches. (2/17/11 A.M. Tr. 100:25-101:4; DX 70, 73.) These components are powered by a power supply (DX70 at 5 ("The chassis uses a redundant primary and secondary transformer power supply. If one supply fails, the other one can provide complete, uninterrupted power to the chassis…. Each individual

module in the chassis includes the circuitry required to provide the appropriate DC power to the board and is isolated from the power supply by a fuse.").) Thus, QuantumNet discloses this element.

16. QuantumNet discloses circuitry that can vary a clock frequency of the processing unit for varying its power consumption ['779 claims 16(c) and 26(c)]

The QuantumNet product documentation described processor options (DX70 at 10 ("133 MHz, 166 Mhz, and 200Mhz Intel Pentium") and clock speeds. (*Id*. ("Clock speed … 133-200 Mhz.").) Dr. McClure testified that "all processors of this era could change the clock frequency and for the purpose of lowering power consumption." (2/22/11 A.M. Tr. 76:11-13). Thus, QuantumNet discloses this element.

IV. HONG IN COMBINATION WITH KETRIS, RLX AND/OR QUANTUMNET RENDERS THE ASSERTED CLAIMS OBVIOUS

U.S. Patent Number 5,764,924, entitled "Method and Apparatus For Extending a Local PCI Bus to a Remote I/O Backplane," ("Hong") discloses a method for extending a PCI bus interface to a remote I/O backplane through a high speed serial link. Prior to May 12, 2000, it would have been obvious to combine Hong with Ketris, RLX and/or QuantumNet to achieve the claimed invention.

A. Hong Is Prior Art Under 35 U.S.C. § 103

U.S. Patent Number 5,764,924, entitled "Method and Apparatus for Extending a Local PCI Bus to a Remote I/O Backplane" (Hong) (DX 54) was filed in 1995 and issued in 1998, prior to the priority date for the patents-in-suit.

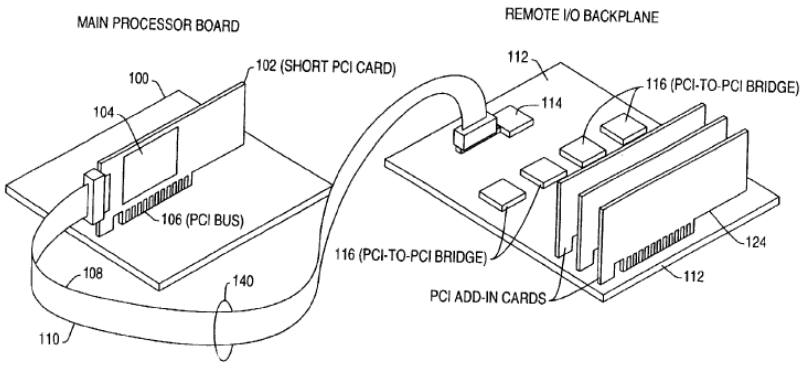
B. One of Skill In The Art Could Easily View The Prior Art And Make The Common Sense Leap To The Asserted Claims

1. The combination of Hong with Ketris, RLX and/or QuantumNet is obvious

Even if the Court accepts ACQIS's contention that the serial Ethernet transactions disclosed in Ketris, RLX and QuantumNet do not meet the encoded serial bit stream of PCI bus transaction limitations in the asserted claims, the combination of Hong's serialized PCI with the prior art modular computing systems is obvious and invalidating.

Hong discloses a system for converting a PCI bus from parallel to serial, and back to parallel, by employing a serial interface between two conventional PCI busses:

FIG. 1



(DX 54 Fig. 1.)

The system of serializing PCI disclosed in Hong is the same as that disclosed in the asserted patents, as illustrated by one of the preferred embodiments of Chu's claimed invention:

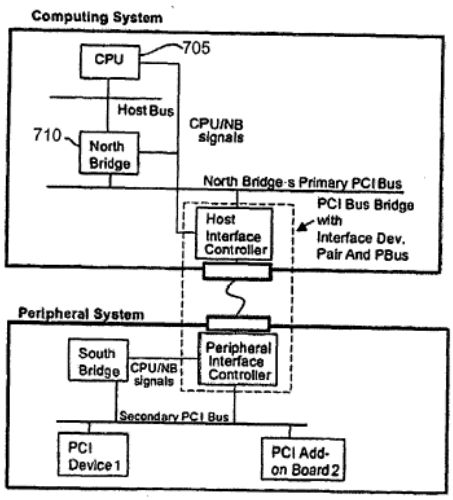


FIG. 7

(DX 259 Fig. 7.) Mr. Gafford, ACQIS's technical expert, admitted at deposition that Hong disclosed serialized PCI prior to Chu's claimed invention. (2/14/11 P.M. 137:17-25.) Both patents disclose a conventional parallel PCI bus transaction that is converted to serial, and then back to parallel. It would be common sense to one of skill in the art that if one wanted to achieve a modular computer system with a serialized PCI bus, Hong could be combined with any of the three prior art systems discussed herein. (2/22/11 A.M. Tr. 66:12-21; 93:24-94:7; 97:6-9.)

2. The elements of the asserted claims were not invented by Chu and known in the prior art

The undisputed testimony of the inventor of the asserted ACQIS patents shows that the elements of the claimed invention were known in the prior art. Dr. Chu admitted that he did not invent the elements of the asserted claims, and that each element was known in the prior art. (2/14/11 P.M. Tr. 133:7-11 [console]; 133:12-15 [Ethernet hub controller]; 133:16-18 [coupling sites]; 133:19-134:3 [a plurality of computer modules, each coupled to one of the coupling sites through a connector and a slot]; 134:4-11 [processing unit]; 134:12-18 [main memory coupled to a processing unit]; 135:10-11 [PCI]; 135:24-136:5 [PCI bus transactions]; 136:6-9 [Ethernet

controller]; 136:10-14 [computer systems with multiple computer modules each working independently]; 136:15-19 [differential signal channels]; 138:5-7 [serialized PCI transaction].)

3. Because the asserted claims simply arrange old elements to yield a predictable result, they are obvious and invalid

"The combination of familiar elements with known methods is obvious when it provides no functionality except for yielding predictable results." *AdvanceMe Inc. v. RapidPay*, 509 F. Supp. 2d 593, 610 (E.D. Tex. 2007) (Davis, J.); *KSR Int'l Co. v. Teleflex Inc*., 550 U.S. 398, 415-416 (2007). This Court has held a patent to be obvious and invalid when "one of skill in the art could easily view the prior art and make the common sense leap" to the asserted claims. *AdvanceMe*, 509 F. Supp. 2d at 625. "[W]hen a patent 'simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious." *KSR*, 550 U.S. at 417 (quoting *Sakraida v. Ag Pro, Inc*., 425 U.S. 273 (1976)).

Here, the result of combining any of the prior art modular computer systems or the known components of existing computer system with Hong's serialized PCI yields no more than a predictable result that could be achieved with the substitution of any serialized communication protocol: increased speed and reduced skew in the serialized PCI transaction. (2/15/11 P.M. Tr. 35:3-6.)

C. The Commercial Success Of PCI Express Does Not Overcome The Other Evidence Of Obviousness

The secondary considerations do not overcome the conclusion that Chu's invention is obvious. The commercial success of PCI Express chips in supposedly practicing the claimed invention is merely evidence of Intel's role as a standards-setting market leader, and not of the inventiveness of Chu's design for a serialized PCI bus transaction within a computer module.

Commercial success "may have relevancy to the overall obviousness determination, but a nexus must exist between the commercial success and the claimed invention." *Tokai Corp. v. Easton Enterprises, Inc.*, --- F.3d ----, 2011 WL 308370, *8 (Fed. Cir. Jan. 31, 2011) (internal quotations, citations omitted). ACQIS proffered no evidence from which one could reasonably infer a nexus between the sales data of IBM's blade center systems and the systems' use of PCI Express. *See id*. at *9 (holding that sales data was not pertinent to the court's obviousness determination when patent holder proffered no evidence to establish a nexus).

Moreover, even assuming the existence of a nexus, secondary considerations cannot overcome the strong evidence of obviousness in using PCI Express. *Compare AdvanceMe*, 509 F. Supp. 2d at 625 (commercial success in practicing claimed methods could not overcome evidence of obviousness). "Granting a patent monopoly to this technological advance that would have occurred in the ordinary course without real innovation retards progress and deprives prior inventions of their value." *Id.* Accordingly, in light of the prior art, the asserted claims are obvious.

CONCLUSION

For the foregoing reasons, IBM respectfully requests that the Court grant its Motion for Judgment as a Matter of Law Regarding Invalidity, and enter judgment that the asserted claims of the '415, '416 and '779 patents are invalid under 35 U.S.C. §§ 102 (a), (b), (g)(2) and 103(a).

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this UNOPPOSED MOTION TO MODIFY DOCKET CONTROL ORDER was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Fed. R. Civ. P. 5(d) and Local Rule CV-5(e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by facsimile and/or U.S. First Class Mail on February 23, 2011.

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